surface science

Contents

Volume 254 (1991) Nos. 1–3

Surface Science Letters

Simulation of semiconductor/electrolyte interfaces in UHV: X-ray induced reactions of Br_2 on InSe(0001) surfaces
T. Mayer, C. Pettenkofer, W. Jaegermann and C. Levy Clement L423

Absolute oxygen chemisorption saturation coverages for Cu single crystal surfaces
M. Wiegel, A.R. Balkenende, O.L.J. Gijzeman, G.W.R. Leibbrandt and F.H.P.M. Habraken L428

Thermal and photo-stimulated desorption of chemisorbed oxygen molecules from titanium dioxide surfaces
Y. Yanagisawa and Y. Ota L433

Scanning tunneling microscopy of monolayer graphite epitaxially grown on a TiC(111) surface
H. Itoh, T. Ichinose, C. Oshima, T. Ichinokawa and T. Aizawa L437

High resolution scanning tunneling microscopy imaging of tungstophosphoric acid
B. Keita and L. Nadjo L443

Surface microfabrication of a gold surface in argon using scanning tunneling microscopy
C.J. Roberts, B. Hoffmann-Millack and W.S. Steer L448

Superperiodic features observed on graphite under solution with scanning tunneling microscopy
P.I. Oden, T. Thundat, L.A. Nagahara, S.M. Lindsay, G.B. Adams and O.F. Sankey L454

Adsorption of H on Si(111)-$\sqrt{3} \times \sqrt{3}$-Ag: evidence for Ag(111) agglomerates formation
K. Oura, K. Sumitomo, T. Kobayashi, T. Kinoshita, Y. Tanaka, F. Shoji and I. Katayama L460

The growth of Ge on a Te/Si(001) surface: surface catalytic epitaxy
S. Higuchi and Y. Nakanishi L465

A LEED structural analysis of the Co($10\bar{1}0$) surface
H. Over, G. Kleinle, G. Ertl, W. Moritz, K.-H. Ernst, H. Wohlgemuth, K. Christmann and E. Schwarz L469

X-ray photoelectron diffraction as a tool for clean surface crystallography studies: the Pt(110)(2 × 1) reconstruction
S. Holmberg, H.C. Poon, Y. Jugnet, G. Grenet and Tran Minh Duc L475

Molecular nitrogen adsorption on Cr(110)
P.A. Dowben, H.-J. Ruppender and M. Grunze L482

A contribution to the $(1 \times n)$ reconstructions of the Ir(110) surface
W. Hetterich, U. Korte, G. Meyer-Ehmsen and W. Heiland L487

On the abrupt neutralization of adsorbed atoms
M.S. Veshchunov L491

Second harmonic generation at metal surfaces: influence of surface charge
F. Marlow L493

Surface Science

A RAIRS and HREELS study of acetone on Pt(111)
M.A. Vannice, W. Erley and H. Ibach 1

A RAIRS and HREELS study of isopropyl alcohol on Pt(111)
M.A. Vannice, W. Erley and H. Ibach 12

High resolution LEED studies of surface misorientation and incommensurate domain walls on reconstructed Pt(110) surface
Y.-L. He, J.-K. Zuo and G.-C. Wang 21

A vibrational study of borazine adsorbed on Pt(111) and Au(111) surfaces
R.J. Simonson, M.T. Paffett, M.E. Jones and B.E. Koel 29

Surface structure determination of Sn deposited on Pt(111) by low energy alkali ion scattering
S.H. Overbury, D.R. Mullins, M.T. Paffett and B.E. Koel 45

Bilayer growth in a metallic system: Fe on Cu(100)
H. Glatzel, Th. Fauster, B.M.U. Scherzer and V. Dose 58

Sulphur adsorption on Cu{110}: a SEXAFS study
A. Atrei, A.L. Johnson and D.A. King 65

Sputtering and radiation-enhanced segregation in amorphous Cu–Ti alloys
G.N. van Wyk, J. du Plessis and E. Taglauer 73

XPS study of thin films of titanium oxysulfides
D. Gonbeau, C. Guimon, G. Pfister-Guillouzo, A. Levasseur, G. Meunier and R. Dormoy 81

Reflection electron microscopy study of clean Si(111) surface reconstruction during the $(7 \times 7) \Leftrightarrow (1 \times 1)$ phase transition
A.V. Latyshev, A.B. Krasilnikov, A.L. Aseev, L.V. Sokolov and S.I. Stenin 90

Secondary electron emission from clean PbSe/SnTe crystals under 15–65 keV Li^+, Na^+ and K^+ ion bombardment
Y. Susuki, T. Baba, S. Fukui and M. Mannami 97

The adsorption of H_2O on K precovered Ni(111) studied by ARUPS and TPD
T. Bornemann, H.-P. Steinrück, W. Huber, K. Eberle, M. Glanz and D. Menzel 105

Direct imaging of CdTe(001) surface reconstructions by high-resolution electron microscopy
P. Lu and D.J. Smith 119

Contents continued on inside cover

Kinetics of hydrogen oxidation to water on the Rh(111) surface using multiple source modulated molecular beam techniques
D.F. Padowitz and S.J. Sibener 125

Radiation damage in an adsorbed monolayer: PF_3 on Ru(0001)
S.A. Joyce, J.A. Yarmoff and T.E. Madey 144

Shielding effects in oxides studied by low-energy ion scattering
G.C. van Leerdam and H.H. Brongersma 153

The influence of surface defects on the O_2/Al(100) interaction
S.A. Larson and L.L. Lauderback 161

Field emission and photofield emission energy distributions from LaB_6
S. Mogren ad R. Reifenberger 169

Formation of divalent Eu silicides at the Eu–Si(111) interface
W.A. Henle, M.G. Ramsey, F.P. Netzer and K. Horn 182

A model for adsorption of O_2 on a Si surface and desorption of SiO at submonolayer coverages
M.K. Koleva 191

Photoluminescence of high porosity and of electrochemically oxidized porous silicon layers
A. Bsiesy, J.C. Vial, F. Gaspard, R. Herino, M. Ligeon, F. Muller, R. Romestain, A. Wasiela, A. Halimaoui and G. Bomchil 195

Ti overlayer growth on oxidized GaAs(110) versus Ti oxidation on physisorbed O_2 on GaAs(110) at 25 K
Y.Z. Li, D.J.W. Aastuen, J.M. Seo, U.S. Ayyala and J.H. Weaver 201

The effect of As on Al and Ga segregation during the codeposition of Al, Ga and As on a GaAs(100) surface: kinetic simulations
Y.-T. Lu and H. Metiu 209

Oxygen scattering and initial chemisorption probability on Ge(100)
D.A. Hansen and J.B. Hudson 222

Step structure and surface reconstruction on vicinal Ge(111) surfaces
T.M. Jung, R.J. Phaneuf and E.D. Williams 235

Chemisorption effects on the dynamics of Ge clusters and ultrathin films
J. Fortner and J.S. Lannin 251

Vibrational properties of aluminum, nickel and copper surfaces
P.D. Ditlevsen and J.K. Nørskov 261

Highly excited molecules from Eley–Rideal reactions
P. Kratzer and W. Brenig 275

Effect of atom motion on metastable deexcitation spectroscopy
K. Makoshi 281

Comparison between two methods of Auger peaks determination: direct background removal and deconvolution
N. Rosenberg, M. Tholomier, E. Vicario and N. Doghmane 289

Adsorption of pairwise interacting atoms: on the derivation of the interaction parameters between first and second neighbors from experimental data
I. Jäger 300

Lateral resolution of Auger electron spectroscopy in the energy range 5–100 keV. Thin overlayers on a high-Z material substrate
N.M. Glezos and A.G. Nassiopoulos 309

Adsorption of H, CO, CH_2, CH_3, and C_2H_4 on MoC. Molecular orbital theory
J. Yu and A.B. Anderson 320

Theoretical study of physisorption and chemisorption of hydrogen on Ag(111) from LSD calculations
C. Mijoule and V. Russier 329

Metal/metal homo-epitaxy on fcc (001) surfaces: Is there transient mobility of adsorbed atoms?
D.E. Sanders and A.E. DePristo 341

Author index 354

Subject index 359

Instructions for Authors 370